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Unsupervised Restoration in Gaussian Pairwise Mixture Model
Stephane Derrode (University Paul Cezanne et Ecole Centrale Marseille, France); Wojciech Pieczynski (Institut Telecom; Telecom SudParis, France)
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A Novel Fourier Transform Estimation Method Using Random Sampling
Mustafa Al-Ani (University of Westminster, United Kingdom); Andrzej Tarczynski (University of Westminster, United Kingdom); Bashar I Ahmad (University of Westminster, United Kingdom)
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SS-06: Special Session on "Energy efficient communications for future networks"

Adaptive Packet Error Rate Target for Energy Efficient Packet Delivery
Emilio Calvanese Strinati (CEA-LETI, France); Rohit Gupta (LETI, France)
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Impact of Mobility on MIMO Green Wireless Systems
Vineeth S Varma (Supelec & ORANGE LABS, France); Mérouane Debbah (Supelec, France); Samson Lasaulce (CNRS/LSS, France); Salah Eddine Elayoubi (Orange Labs, France)
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Energy-Efficient Link Adaptation on Parallel Channels
Christian Isheden (Technische Universität Dresden, Germany); Gerhard Fettweis (Technische Universität Dresden, Germany)
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Towards a Low Energy LTE Cellular Network: Architectures
Weisi Guo (University of Sheffield & University of Cambridge, United Kingdom); Charles Turyagyenda (Sheffield University, United Kingdom); Hassan Hamdoun (Swansea University, United Kingdom); Siyi Wang (The University of Sheffield, United Kingdom); Pavel Loskot (Swansea University, United Kingdom); Timothy O'Farrell (University of Swansea, United Kingdom)
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Simple Models for Power Optimization Across Transmission, Equalization and Decoding
Pulkit Grover (University of California, Berkeley, USA); Anant Sahai (UC Berkeley, USA); Ji-Hoon Park (UC Berkeley, USA)
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SS-07: Special Session on "Signal processing for disaster management and prevention"

A Multi-Sensor Network for the Protection of Cultural Heritage
Nikos Grammalidis (Centre for Research and Technology Hellas, Greece); Enis Çetin (Bilkent University, Turkey); Kosmas Dimitropoulos (Centre for Research and Technology Hellas, Informatics and Telematics Institute, Greece); Filareti Tsalakanidou (Centre for Research and Technology Hellas, Greece); Kivanc Kose (Bilkent University, Turkey); Osman Gunay (Bilkent University, Turkey); Benedict Gouverneur (Xenics NV, Belgium); Dino Torri (Consiglio Nazionale delle Ricerche, Italy); Ercan Engin Kuruoglu (CNR, Italy); Saverio Tozzi (Centro di Scienze Naturali, Italy); Amel Benazza (SUP'COM, Tunisia); Ferdaous Chaabane (SUP'COM, Tunisia); Bilgin Kosucu (Yeditepe University, Turkey); Cem Ersoy (Bogazici University, Turkey)
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Real-Time Wildfire Detection Using Correlation Descriptors
Yusuf Hakan Habiboglu (Bilkent University, Turkey); Osman Gunay (Bilkent University, Turkey); A. Enis Cetin (Bilkent University, Turkey)
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Analysis of Seismic Behavior of a Building From Turkey Using Real Earthquake Records
Ulgen Mert Tugsal (Istanbul Technical University, Turkey); Suleyman Baykut (Istanbul Technical University, Turkey); Beyza Taskin (Istanbul Technical University, Turkey); Tayfun Akgul (Istanbul Technical University, Turkey)
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Wavelet-based Multi-modal Fire Detection
Steven Verstockt (Ghent University – IBBT & University College West Flanders, Belgium); Ioannis Kypraios (ICTM, London & School of Engineering and Design, University of Sussex, United Kingdom); Pieterjan De Potter (Ghent University – IBBT, Belgium); Chris Poppe (TomTom, Belgium); Rik Van de Walle (Ghent University - IBBT, Belgium)
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Seismic Activity-Related Anomaly Detection in Soil Radon Emanation
Suleyman Baykut (Istanbul Technical University, Turkey); Tayfun Akgul (Istanbul Technical University, Turkey); Sedat Inan (TUBITAK - Marmara Research Center, Turkey)
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IVP-P5: Object recognition and visual categorization

Evaluating Dimensionality Reduction Techniques for Visual Category Recognition Using Rényi Entropy
Ashish Gupta (University of Surrey, United Kingdom); Richard Bowden (University of Surrey, United Kingdom)
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Discriminant Splitting for Feature Extraction Applicable to View-Independent Object Recognition
Ioannis Marras (Aristotle University of Thessaloniki, Greece); Nikos Nikolaidis (Aristotle University of Thessaloniki & Informatics and Telematics Institute, CERTH, Greece); Ioannis Pitas (Aristotle

ML-P1: Machine learning

Carlos, Spain); Manel Martinez-Ramon (Universidad Carlos III de Madrid, Spain); Alicia Guerrero-Curieses (Universidad Rey Juan Carlos, Spain); Antonio J. Caamaño (Rey Juan Carlos University of Madrid, Spain)
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A SVD-Based Classification of Bird Singing in Different Time-Frequency Domains Using Multitapers
Maria Sandsten (Lund University, Sweden); Maja Tarka (Lund University, Sweden); Jessica Caissy-Martineau (Lund University, Sweden); Bengt Hansson (Lund University, Sweden); Dennis Hasselquist (Lund University, Sweden)
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A Model for Quasi-Periodic Signals with Application to Rain Estimation From Microwave Link Gain
Christoph Reller (ETH Zurich, Switzerland); Hans-Andrea Loeliger (ETH Zurich, Switzerland); Juan Pablo Marín Díaz (Latinno Institute for Data Processing and Analysis, Colombia)
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SPT-P2: Estimation theory

Source Enumeration Using the Bootstrap for Very Few Samples
Zhihua Lu (Darmstadt University of Technology, Germany); Abdelhak M Zoubir (Darmstadt University of Technology, Germany); Florian Roemer (Ilmenau University of Technology, Germany); Martin Haardt (Ilmenau University of Technology, Germany)
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A New Error Bound for MIMO Discrete-Time State-Space Transversal Estimators
Yuriy S. Shmaliy (Guanajuato University, Mexico); Oscar Ibarra-Manzano (Guanajuato University, Mexico)
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A Kalman-Like FIR Estimator Ignoring Noise and Initial Conditions
Yuriy S. Shmaliy (Guanajuato University, Mexico)
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Estimation of Multichannel TVAR Parameters From Noisy Observations Based on an Evolutive Method
Hiroshi Ijima (Wakayama University, Japan); Eric Grivel (Université de Bordeaux, France)
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Robust QAM Classification Using Genetic Programming and Fisher Criterion
Muhammad Waqar Aslam (University of Liverpool, United Kingdom); Zhechen Zhu (The University of Liverpool, United Kingdom); Asoke K Nandi (The University of Liverpool, United Kingdom)
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IVP-L4: Biomedical image processing

Signal Processing Algorithms for Removing Banding Artifacts in MRI
Marcus Björk (Uppsala University, Sweden); Erik Gudmundson (Lund University, Sweden); Joëlle

Barral (Stanford University, USA); Petre Stoica (Uppsala University, Sweden)
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Microscopic Image Classification Using Sparsity in a Transform Domain and Bayesian Learning
Alexander Suhre (Bilkent University, Turkey); Tulin Ersahin (Bilkent University, Turkey); Rengul Cetin-Atalay (Bilkent University, Turkey); A. Enis Cetin (Bilkent University, Turkey)
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Representing Clumps of Cell Nuclei as Unions of Elliptic Shapes by Using the MDL Principle
Jenni Hukkanen (Tampere University of Technology, Finland); Edmond Sabo (Rappaport Technion & the Legacy Heritage Clinical Research Institute at Rambam (LHCRIR), Israel); Ioan Tabus (Tampere University of Technology, Finland)
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Registration of Ultrasound Image Sequences for Perfusion Analysis
Vratislav Harabis (Brno University of Technology, Czech Republic); Radim Kolar (Brno University of Technology, Czech Republic); Radovan Jirik (Brno University of Technology & Academy of Sciences of the Czech Republic, Czech Republic)
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Detection of Exudates From Digital Fundus Images Using a Region-Based Segmentation Technique
Hussain Jaafar (University of Liverpool, United Kingdom); Asoke K Nandi (The University of Liverpool, United Kingdom); Waleed Al-Nuaimy (University of Liverpool, United Kingdom)
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SAM-L1: Sensor networks

Diffusion-based Bias-Compensated RLS for Distributed Estimation Over Adaptive Sensor Networks
Alexander Bertrand (Katholieke Universiteit Leuven, Belgium); Marc Moonen (Katholieke Universiteit Leuven, Belgium); Ali H. Sayed (University of California, Los Angeles, USA)
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Performance Analysis of a Distributed Robbins-Monro Algorithm for Sensor Networks
Pascal Bianchi (Telecom Paristech - LTCI, France); Gersende Fort (CNRS, France); Walid Hachem (Telecom-paristech, France); Jérémie Jakubowicz (Telecom ParisTech, France)
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Asymptotically Consistent One-Bit Detection in Large Sensor Networks
Paolo Braca (University of Salerno, Italy); Stefano Marano (University of Salerno, Italy); Vincenzo Matta (University of Salerno, Italy)
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Spatio-Temporal Diffusion Mechanisms for Adaptation Over Networks
Jaewoo Lee (Pohang University of Science and Technology, Korea); Seong-Eun Kim (POSTECH, Korea); Woo-Jin Song (Pohang University of Science and Technology, Korea); Ali H. Sayed (University of California, Los Angeles, USA)
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Improved GLRT Based on the Exploitation of Spatial Correlation Between Neighboring Sensors
Sadiq Ali (Universidad Autonoma de Barcelona, Spain); José A. López-Salcedo (Universitat Autònoma de Barcelona, Spain); Gonzalo Seco-Granados (Universitat Autonoma de Barcelona, Spain)
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SS-05: Special Session on "Multimodal (audio-visual) speech separation"

Multimodal Blind Source Separation with a Circular Microphone Array and Robust Beamforming
Syed Mohsen Raza Naqvi (Loughborough University UK, United Kingdom); Muhammad S. Khan (Loughborough University, United Kingdom); Qingju Liu (University of Surrey, United Kingdom); Wenwu Wang (University of Surrey, United Kingdom); Jonathon A Chambers (Loughborough University, United Kingdom)
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Towards Real-Time Audiovisual Speaker Localization
Gianluca Monaci (Philips research, The Netherlands)
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Robust Feature Selection for Scaling Ambiguity Reduction in Audio-Visual Convolutive BSS
Qingju Liu (University of Surrey, United Kingdom); Syed Mohsen Raza Naqvi (Loughborough University UK, United Kingdom); Wenwu Wang (University of Surrey, United Kingdom); Philip JB Jackson (University of Surrey, United Kingdom); Jonathon A Chambers (Loughborough University, United Kingdom)
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Multipose Audio-Visual Speech Recognition
Virginia Estellers (Ecole Polytechnique Federale de Lausanne, Switzerland); Jean-Philippe Thiran (École Polytechnique Fédérale de Lausanne & Signal Processing Laboratory, Switzerland)
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When Silence is Gold
Bertrand Rivet (GIPSA-Lab, Grenoble INP, France); Christian Jutten (GIPSA-Lab, France)
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SS-08: Special Session on "Interference alignment"

Grassmannian Differential Limited Feedback for Interference Alignment
Omar El Ayach (The University of Texas at Austin, USA); Robert Heath (The University of Texas at Austin, USA)
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A CoMP Downlink Transmission System Verified by Cellular Field Trials
Joerg Holfeld (Technische Universität Dresden, Germany); Ines Riedel (Technische Universität Dresden, Germany); Gerhard Fettweis (Technische Universität Dresden, Germany)
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Experimental Evaluation of Interference Alignment Under Imperfect Channel State Information
José A. García-Naya (University of A Coruña, Spain); Luis Castedo (University of A Coruña, Spain);

Óscar González (University of Cantabria, Spain); David Ramírez (University of Cantabria, Spain); Ignacio Santamaria (University of Cantabria, Spain)
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Interference Alignment in UMTS Long Term Evolution
Jörg Reitterer (Vienna University of Technology, Austria); Markus Rupp (Vienna University of Technology, Austria)
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Interference Alignment in the Partially Connected K-User MIMO Interference Channel
Maxime Guillaud (Vienna University of Technology, Austria); David Gesbert (Eurecom, France)
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Adaptive Color Decorrelation for Predictive Image Codecs
François Pasteau (IETR / INSA Rennes, France); Clément Strauss (IETR / INSA Rennes, France); Marie Babel (IETR / INSA Rennes, France); Olivier Deforges (IETR / INSA Rennes, France); Laurent Bedat (IETR / INSA Rennes, France)
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Multiple Description Peer-To-Peer Video Streaming Using Coalitional Games
Simone Milani (University of Padova, Italy); Stefano Busato (University of Padova, Italy); Giancarlo Calvagno (University of Padova, Italy)
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A Joint Trellis Coded Quantization (TCQ) Data Hiding Scheme in the JPEG2000 Part 2 Coding Framework
Dalila Goudia (LIRMM, France); Marc Chaumont (LIRMM, France); William Puech (University of Montpellier & LIRMM, France); Naima Hadj Said (Universté des Sciences et de la Technologie d'Oran, Algeria)
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A Compression Method for 3-D Laser Range Scans of Indoor Environments Based on Compressive Sensing
Oguzcan Dobrucali (Bilkent University, Turkey); Billur Barshan (Bilkent University, Turkey)
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A Compressive Sampling Scheme for Iterative Hyperspectral Image Reconstruction
Andrea Abrardo (University of Siena, Italy); Mauro Barni (University of Siena, Italy); Cesare M Carretti (University of Siena, Italy); Kamdem (University of Siena, Italy); Enrico Magli (Politecnico di Torino, Italy)
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SPA-P1: Remote sensing and geophysical signal processing

Non-Gaussian Background Modeling for Anomaly Detection in Hyperspectral Images
Eyal Madar (Technion - Israel Institute of Technology, Israel); David Malah (Technion - Israel Institute of Technology, Israel); Meir Barzohar (Technion - Israel Institute of Technology, Israel)

SPCOM-L3: Distributed beamforming

Decentralized Phase Synchronization Scheme for Collaborative Beamforming in Wireless Sensor Networks
Lazar Berbakov (Centre Tecnologic de Telecomunicacions de Catalunya, Spain); Javier Matamoros (Centre Tecnologic de Telecomunicacions de Catalunya, Spain); Carles Antón-Haro (Centre Tecnologic de Telecomunicacions de Catalunya (CTTC), Spain)
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Impact of Carrier Frequency Offset in Cooperative Phase Shift Beamforming
Kanglian Zhao (Nanjing University, P.R. China); Yann Lebrun (IMEC / KULeuven, Belgium); Andre Bourdoux (IMEC, Belgium); Sofie Pollin (IMEC / UC Berkeley, USA); François Horlin (Université Libre de Bruxelles, Belgium); Sidan Du (Nanjing University, P.R. China); Rudy Lauwereins (IMEC, Leuven, Belgium)
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Residual Energy-Aware Collaborative Transmission Beamforming in Wireless Sensor Networks
Jimmy Nsenga (CETIC, Belgium); Sebastien Dawans (CETIC, Belgium); Valery Ramon (Centre d'Excellence en Technologies de l'Information et de la Communication (CETIC), Belgium); Andre Bourdoux (IMEC, Belgium); François Horlin (Université Libre de Bruxelles, Belgium)
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Performance Analysis of the Distributed ZF Beamformer in the Presence of Carrier Frequency Offset
Yann Lebrun (IMEC / KULeuven, Belgium); Kanglian Zhao (Nanjing University, P.R. China); Sofie Pollin (IMEC / UC Berkeley, USA); Andre Bourdoux (IMEC, Belgium); François Horlin (Université Libre de Bruxelles, Belgium); Rudy Lauwereins (IMEC, Leuven, Belgium)
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Robust Time-Slotted Round-Trip Carrier and Timing Synchronization for Distributed Beamforming
Marti Mañosas-Caballú (Universitat Autonoma de Barcelona (UAB), Spain); Gonzalo Seco-Granados (Universitat Autonoma de Barcelona, Spain)
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SPT-P3: Spectral estimation and cognitive radio

Preconditioned Conjugate Gradient IAA Spectral Estimation
George Glentis (University of Peloponesse, Greece); Andreas Jakobsson (Lund University, Sweden)
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Random Sampling ADC for Sparse Spectrum Sensing
Patrick Maechler (ETH Zurich, Switzerland); Norbert Felber (ETHZ, Switzerland); Andreas Burg (EPFL, Switzerland)
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Modulation Detection in the Time-Frequency Domain for Cognitive Radio Systems
Yesim Hekim Tanc (Istanbul University, Turkey); Aydin Akan (Istanbul University, Turkey)
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The Generalization of Discrete Stockwell Transforms
Yusong Yan (York University, Canada); Hongmei Zhu (York University & Canada, Canada)
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Collaborative Spectrum Sensing Based on Upper Bound on Joint PDF of Extreme Eigenvalues
Muhammad Zeeshan Shakir (King Abdullah University of Science and Technology & University of Strathclyde, United Kingdom, Saudi Arabia); Wuchen Tang (University of Surrey, United Kingdom); Muhammad Ali Imran (University of Surrey, United Kingdom); Mohamed-Slim Alouini (KAUST, Saudi Arabia)
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A SARS Multiband Spectrum Sensing Method in Wideband Communication Systems Using RSG
Bashar I Ahmad (University of Westminster, United Kingdom); Andrzej Tarczynski (University of Westminster, United Kingdom); Mustafa Al-Ani (University of Westminster, United Kingdom)
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Robust Spectrum Sensing for Cognitive Radio
Tõnu Trump (Tallinn University of Technology, Estonia); Ivo Müürsepp (Tallinn University of Technology, Estonia)
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Opportunistic Spectrum Access in Multi-User Multi-Channel Cognitive Radio Networks
Sachin Shetty (Tennessee State University, USA); Kodzo Agbedanu (University of North Texas, USA); Ravi Prakash Ramachandran (Rowan University, USA)
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Space-Time-Frequency Candidate Methods for Spectrum Sensing
Eva Lagunas (Universitat Politècnica de Catalunya, Spain); Montse Nájar (UPC, Spain); Miguel Angel Lagunas (Telecommunications Technological Center of Catalonia, Spain)
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SS-09: Special Session on "2D and 3D image analysis of paintings"

Virtual Underpainting Reconstruction From X-ray Fluorescence Imaging Data
Anila Anitha (University of Colorado at Boulder, USA); Andrei Brasoveanu (Princeton University, USA); Marco Duarte (Duke University, USA); Shannon Hughes (University of Colorado at Boulder, USA); Ingrid Daubechies (Princeton University, USA); Joris Dik (University of Delft, The Netherlands); Koen Janssens (University of Antwerp, Belgium); Matthias Alfeld (University of Antwerp, Belgium)
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Higher-order Spatial Statistics and Perceptual Judgements in the Stylometric Analysis of Art
James Hughes (Dartmouth College, USA); Daniel Graham (Dartmouth College, USA); Robert Jacobsen (Aalborg University, Denmark); Dan Rockmore (Dartmouth College, USA)
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3-Dimensional Digital Fingerprint of Paintings
Bernd Breuckmann (Breuckmann GmbH, Germany)
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Digital Painting Analysis, At the Cross Section of Engineering, Mathematics and Culture
Bruno Cornelis (Vrije Universiteit Brussel, Belgium); Ann Dooms (Vrije Universiteit Brussel, Belgium); Jan P.H. Cornelis (Vrije Universiteit Brussel, Belgium); Frederik Leen (Royal Museums of Fine-Arts of Belgium, Belgium); Peter Schelkens (Vrije Universiteit Brussel, Belgium)
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Using Local Features for Efficient Layout Analysis of Ancient Manuscripts
Angelika Garz (Vienna University of Technology, Austria); Robert Sablatnig (Vienna University of Technology, Austria); Markus Diem (Vienna University of Technology, Austria)
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SS-10: Special Session on "Recent advances in adaptive filtering for audio and acoustics"

Evolutionary Adaptive Filtering Based on Competing Filter Structures
Marcus Zeller (University of Erlangen-Nuremberg, Germany); Walter Kellermann (University Erlangen-Nuremberg, Germany)
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Combinations of Proportionate Adaptive Filters in Acoustics: an Application to Active Noise Control
Jerónimo Arenas-García (Universidad Carlos III de Madrid, Spain); María De Diego (Universidad Politecnica De Valencia, Spain); Luis Azpicueta-Ruiz (Universidad Carlos III de Madrid, Spain); Miguel Ferrer (Universidad Politecnica de Valencia, Spain); Alberto Gonzalez (Universidad Politecnica de Valencia, Spain)
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An Adaptive Multiple Position Room Response Equalizer
Stefania Cecchi (Università Politecnica delle Marche, Italy); Andrea Primavera (Università Politecnica delle Marche, Italy); Francesco Piazza (Università Politecnica delle Marche, Italy); Alberto Carini (University of Urbino, Italy)
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Comparison of Multiple-Microphone and Single-Loudspeaker Adaptive Feedback/echo Cancellation Systems
Meng Guo (Aalborg University & Oticon A/S, Denmark); Thomas Bo Elmedyb (Oticon A/S, Denmark); Søren Holdt Jensen (Aalborg University, Denmark); Jesper Jensen (Oticon, Denmark)
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FPGA Implementation of an Efficient Proportionate Affine Projection Algorithm for Echo Cancellation
Cristian Stanciu (University Politehnica of Bucharest, Romania); Cristian Anghel (University Politehnica of Bucharest, Romania); Constantin Paleologu (University Politehnica of Bucharest, Romania); Jacob Benesty (INRS-EMT, University of Quebec, Canada); Felix Albu (Politehnica University of Bucharest, Romania); Silviu Ciochina (University Politehnica of Bucharest, Romania)
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SPE-P2: Speaker and acoustic event recogniton

Assessment of Audio Features for Automatic Cough Detection
Thomas Drugman (Faculté Polytechnique de Mons, Belgium); Jerome Urbain (University of Mons, Belgium); Thierry Dutoit (FPMS, Belgium)
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Speaker Recognition in Noisy Conditions with Limited Training Data
Niall McLaughlin (Queens University Belfast, United Kingdom); Ji Ming (Queens University Belfast, United Kingdom); Danny Crookes (Queen's University of Belfast, United Kingdom)
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Speaker Identification Using Diffusion Maps
Yan Michalevsky (Technion - Israel Institute of Technology, Israel); Ronen Talmon (Technion - Israel Institute of Technology, Israel); Israel Cohen (Technion, Israel)
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VQ-UBM Based Speaker Verification Through Dimension Reduction Using Local PCA
Cemal Hanilci (Uludag University, Turkey); Figen Ertas (Uludag University, Turkey)
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Latent Semantic Analysis in Sound Event Detection
Annamaria Mesaros (Tampere University of Technology, Finland); Toni Heittola (Tampere University of Technology, Finland); Anssi Klapuri (Tampere University of Technology, Finland)
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Discriminative Acoustic Event Recognition in Multimedia Recordings
Saurabh Khanwalkar (Raytheon BBN Technologies, USA); Guruprasad Saikumar (Raytheon BBN Technologies, USA); Amit Srivastava (Raytheon BBN Technologies, USA); Premkumar Natarajan (BBN Technologies, USA)
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Two-Source Acoustic Event Detection and Localization: Online Implementation in a Smart-Room
Taras Butko (Technical University of Catalonia & TALP Research Center, Spain); Fran González Pla (Technical University of Catalonia, Spain); Carlos Segura (Technical University of Catalonia, Spain); Climent Nadeu (UPC, Spain); Javier Hernando (Technical University of Catalonia, Spain)
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AUD-P3: Multichannel acoustic processing II

Inverse Wave Propagation for Reproducing Virtual Sources in Front of Loudspeaker Array
Shoichi Koyama (NTT Cyber Space Laboratories, Japan); Yusuke Hiwasaki (NTT, Japan); Ken'ichi Furuya (NTT Cyber Space Laboratories, Japan); Yoichi Haneda (NTT Cyber Space Laboratories, Japan)
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A Bimodal Sound Source Model for Vehicle Tracking in Traffic Monitoring
Patrick Marmaroli (LEMA-EPFL & LEMA, Switzerland); Jean-Marc Odobez (IDIAP, Switzerland); Xavier Falourd (LEMA-EPFL, Switzerland); Hervé Lissek (LEMA-EPFL, Switzerland)

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Oversteering of End-Fire Arrays with Frequency-Invariant Beam Patterns
Federico Traverso (University of Genoa, Italy); Marco Crocco (University of Genoa, Italy); Andrea Trucco (University of Genoa, Italy); Gianni Vernazza (Universita' di Genova, Italy)
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Virtual Source Panning Using Multiple-Wise Vector Base in the Multispeaker Stereo Format
Se-Woon Jeon (Yonsei University, Korea); Young-cheol Park (Yonsei University, Korea); Seok-pil Lee (Korean Electronics Technology Institute, Korea); Dae Hee Youn (Yonsei University, Korea)
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Real-time Phase-isolation Algorithm for Speech Separation
David Ayllón (University of Alcalá, Spain); Avram Levi (Brown University, USA); Harvey Silverman (Brown University, USA)
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Blind Estimation of the Coherent-to-Diffuse Energy Ratio From Noisy Speech Signals
Marco Jeub (RWTH Aachen University, Germany); Christoph Nelke (RWTH Aachen University, Germany); Christophe Beaugeant (Intel Mobile Communications, France); Peter Vary (RWTH Aachen University, Germany)
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IVP-P6: Multiview and 3D coding

Sparse Representation of Dense Motion Vector Fields for Lossless Compression of 4-D Medical CT Data
Andreas Weinlich (Chair of Multimedia Communications and Signal Processing, University of Erlangen-Nuremberg & Siemens Corporate Technology, Imaging and Visualization, Germany); Peter Amon (Siemens, Germany); Andreas Hutter (Siemens Corporate Technology, Germany); Andre Kaup (University of Erlangen-Nuremberg, Germany)
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Multiresolution Decomposition Using Morphological Filters for 3D Volume Image Decorrelation
Dragana Sandić-Stanković (Institute for Telecommunication and Electronics, IRITEL AD BEOGRAD, Serbia)
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A Fast Intra Encoder of Frame-compatible Format Based on Content Similarity for 3D Distribution
Zhuoying Zeng (Waseda University, Japan); Xin Jin (Waseda University, Japan); Satoshi Goto (Waseda University, Japan)
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Viewing Angle Dependent Coding of Digital Holograms
Dae-Hyun Lee (Seoul National University, Korea); Jae-Young Sim (UNIST, Korea); Chang-Su Kim (Korea University, Korea); Sang-Uk Lee (Seoul National University, Korea)
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Error-Resilient Video Transmission for 3-D Signal Over Cooperative-MIMO System
Omar Salim (University of Southen Queensland & USQ, Australia); Wei Xiang (University of Southern

Queenslan, Australia); John Leis (University of Southern Queensland, Australia)
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SPA-L1: Biomedical signal processing I

Hidden Conditional Random Fields for Classification of Imaginary Motor Tasks From EEG Data
Jaime Delgado Saa (Sabanci University & Universidad del Norte, Turkey); Mujdat Cetin (Sabanci University, Turkey)
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Theoretical Analysis of xDAWN Algorithm: Application to an Efficient Sensor Selection in a P300 BCI
Bertrand Rivet (GIPSA-Lab, Grenoble INP, France); Hubert Cecotti (GIPSA-lab CNRS UMR, France); Antoine Souloumiac (CEA, LIST, Laboratoire Outils pour l'Analyse de Données, France); Emmanuel Maby (INSERM, U821, Brain Dynamics and Cognition, France); Jeremie Mattout (INSERM, France)
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Mean Frequency Estimation of Surface EMG Signals Using Filterbank Methods
Stephen R Alty (King's College London & Division of Engineering, United Kingdom); Apostolos Georgakis (King's College London, United Kingdom)
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Interdependence of Sympathovagal Balance and Irreversibility of Heart Rate Oscillations
Lenka Chladekova (Comenius University, Jessenius Faculty of Medicine, Slovakia); Zuzana Turianikova (Comenius University, Jessenius Faculty of Medicine, Slovakia); Ingrid Tonhajzerova (Comenius University, Jessenius Faculty of Medicine, Slovakia); Andrea Calkovska (Comenius University, Jessenius Faculty of Medicine, Slovakia); Michal Javorka (Comenius University, Jessenius Faculty of Medicine, Slovakia)
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Ocular Artifact Removal From EEG: a Comparison of Subspace Projection and Adaptive Filtering Methods
Eleni Kroupi (EPFL, Switzerland); Ashkan Yazdani (Ecole Polytechnique Federale de Lausanne, Switzerland); Jean-Marc Vesin (EPFL, Switzerland); Touradj Ebrahimi (EPFL, Switzerland)
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SPT-P4: Filter design and adaptive implementations

Low Complexity Frequency-response Masking Filters Using Modified Structure Based on Serial Masking
Tian Shen (Nanyang Technological University, Singapore); Yong Ching Lim (Nanyang Technological University, Singapore)
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FIR Filter Optimization with POS3POLY in CVX
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SS-12: Special Session on "Processing and recovery using analysis and synthesis sparse models"

Adaptive Structured Block Sparsity Via Dyadic Partitioning
Gabriel Peyré (CNRS and Université Paris-Dauphine, France); Jalal Fadili (GREYC CNRS UMR 6072, ensicaen, France); Christophe Chesneau (University of Caen, France)
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Iterative Cosparse Projection Algorithms for the Recovery of Cosparse Vectors
Raja Giryes (Technion, Israel); Sangnam Nam (INRIA Rennes - Bretagne Atlantique Campus de Beaulieu, France); Rémi Gribonval (INRIA, France); Mike Davies (University of Edinburgh, United Kingdom)
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Sequential Minimal Eigenvalues - an Approach to Analysis Dictionary Learning
Boaz Ophir (Technion - Israel Institute of Technology, Israel); Michael Elad (Technion, Israel); Nancy Bertin (CNRS, IRISA - UMR, France); Mark D. Plumbley (Queen Mary University of London, United Kingdom)
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Mehrdad Yaghoobi (University of Edinburgh, United Kingdom); Sangnam Nam (INRIA Rennes - Bretagne Atlantique Campus de Beaulieu, France); Rémi Gribonval (INRIA, France); Mike Davies (University of Edinburgh, United Kingdom)
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SPE-L2: Automatic speech recognition I

Unsupervised Language Model Adaptation Using Latent Dirichlet Allocation and Dynamic Marginals
Md. Akmal Haidar (INRS-EMT, Canada); Douglas O'Shaughnessy (INRS-Énergie-Matériaux-Télécommunications, Canada)
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Exploiting Local and Global Structures for TIMIT Phone Classification
Heyun Huang (Radbound University Nijmegen, The Netherlands); Louis ten Bosch (Radboud Universiteit Nijmegen, The Netherlands); Jort Gemmeke (Katholieke Universiteit Leuven, Belgium); Bert Cranen (Radboud University Nijmegen, The Netherlands); Lou Boves (Radboud University Nijmegen, The Netherlands)
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Toward a Practical Implementation of Exemplar-Based Noise Robust ASR
Jort Gemmeke (Katholieke Universiteit Leuven, Belgium); Antti Hurmalainen (Tampere University of Technology, Finland); Tuomas Virtanen (Tampere University of Technology, Finland); Yang Sun (Radboud University Nijmegen, The Netherlands)

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Early Fusion of Sparse Classification and GMM for Noise Robust ASR
Yang Sun (Radboud University Nijmegen, The Netherlands); Jort Gemmeke (Katholieke Universiteit Leuven, Belgium); Bert Cranen (Radboud University Nijmegen, The Netherlands); Louis ten Bosch (Radboud Universiteit Nijmegen, The Netherlands); Lou Boves (Radboud University Nijmegen, The Netherlands)
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Audio-visual Isolated Digit Recognition for Whispered Speech
Xing Fan (University of Texas at Dallas, USA); Carlos A Busso (University of Texas at Dallas, USA); John Hansen (University of Texas at Dallas, USA)
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IMP-P2: Design and implementation. Poster II

Prototyping Processing-Demanding Physical Layer Systems Featuring Single or Multi-antenna Schemes
Oriol Font-Bach (Centre Tecnològic de Telecomunicacions de Catalunya, Spain); Nikolaos Bartzoudis (CTTC, Spain); Antonio Pascual-Iserte (Universitat Politècnica de Catalunya, Spain); David López Bueno (Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Spain)
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Alfonso Fernandez-Vazquez (National Polythecnic Institute, Mexico); Gordana Jovanovic Dolecek (INAOE, Mexico)
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Real Time FPGA Implementation of Automatic Modulation Classifier for Electronic Warfare Applications
Jesús Grajal (Universidad Politécnica de Madrid, Spain); Omar Yeste (Universidad Politécnica de Madrid, Spain); Miguel Sanchez (Universidad Politécnica de Madrid, Spain); Mario Garrido (Technical University of Madrid, Spain); Marisa Lopez-Vallejo (Universidad Politecnica Madrid, Spain)
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Cagatay Dikici (Supelec, France); Anissa Mokraoui (Université Paris 13, Institut Galilée, L2TI, France); Michel Kieffer (L2S - CNRS - SUPELEC - UniversityParis-Sud, France); Pierre Duhamel (Lss Supelec & CNRS, France)
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A 1 Gbin/s CABAC Encoder for H.264/AVC
Wei Fei (Waseda University, Japan); Dajiang Zhou (Waseda University, Japan); Satoshi Goto (Waseda University, Japan)
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Efficient Implementation of Optical Flow Algorithm Based on Directional Filters on a GPU Using CUDA
Robert Hegner (University of Applied Sciences of Eastern Switzerland in Rapperswil, Switzerland); Ivar Austvoll (University of Stavanger, Norway); Tom Ryen (University of Stavanger, Norway); Guido

M Schuster (University of Applied Sciences of Eastern Switzerland in Rapperswil, Switzerland)
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Accurate Minimax Design of Variable Fractional-Delay Filters Using Linearized Octagonal Constraints
Tian-Bo Deng (Toho University, Japan)
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SPA-P2: Biomedical signal processing II

System Interpretation of Causality Measures in Frequency Domain Used in EEG Analysis
Tomas Boril (Czech Technical University in Prague, Czech Republic); Pavel Sovka (Czech Technical University in Prague, Faculty of Electrical Engineering, Czech Republic)
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Application of Tonal Index to Pulmonary Wheezes Detection in Asthma Monitoring
Martin Wisniewski (AGH University of Science and Technology, Poland); Tomasz P. Zielinski (AGH University of Science and Technology, Poland)
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Dynamics of the Alpha Peak Frequency During Flicker Stimulation
Gary Garcia-Molina (Philips, The Netherlands); Piotr Milanowski (University of Warsaw, Poland)
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Characterizing Working Memory Load Using EEG Delta Activity
Pega Zarjam (University of New South Wales, Australia); Julien Epps (University of NSW, Australia); Fang Chen (National ICT Australia (NICTA), Australia)
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A Saccade-Related Noise Reduction in EEG Signals Using Outer Product Expansion with Reference Signal
Akitoshi Itai (Aichi Prefectural University, Japan); Arao Funase (Nagoya Institute of Technology, Japan); Andrzej S Cichocki (RIKEN BSI, Laboratory for Advanced Brain Signal Processing, Japan); Hiroshi Yasukawa (Aichi Prefectural University, Japan)
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Segmentation of Accelerometer Signals Recorded During Continuous Treadmill Walking
Laurent Oudre (Telecom ParisTech, France); Alexandre Lung-Yut-Fong (Institut Télécom / Télécom ParisTech & CNRS, France); Pascal Bianchi (Telecom Paristech - LTCI, France)
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Estimation of the Respiratory System Parameters
Görkem Sert (Istanbul Uni., Turkey); Esra Saatci (Istanbul Kultur University, Turkey); Guray Gurkan (Istanbul Kultur University, Turkey); Aydin Akan (Istanbul University, Turkey)
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ECG Compressed Sensing Based on Classification in Compressed Space and Specified Dictionaries
Fira Catalina Monica (Institute of Computer Science, Romania); Liviu Goras (Technical University of Iassy, Romania); Barabasa Constantin (Gheorghe Asachi Technical University of Iasi, Romania); Nicolae Cleju ("Gh. Asachi" Technical University of Iasi, Romania)

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An Algebraic Derivative-Based Method for R Wave Detection
Sonia Rezk (Unversity of Carthage, Tunisia); Cédric Join (INRIA-ALIEN & CRAN (CNRS, UMR 7039), Nancy-Université, France); EL Asmi Sadok (SUPCOM, Tunisia)
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SPCOM-P3: Multicarrier modulations

The Rate Maximization Problem in DSL with Mixed Spectrum and Signal Coordination
Rodrigo B. Moraes (Katholieke Universiteit Leuven, Belgium); Paschalis Tsiaflakis (Université Catholique de Louvain, Belgium); Jochen Maes (Alcatel-Lucent Bell Labs, Belgium); Leo P. Van Biesen (Free University of Brussels, Vrije Universiteit Brussel, Belgium); Marc Moonen (Katholieke Universiteit Leuven, Belgium)
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Perfect Reconstruction DFT Modulated Oversampled Filter Bank Transceivers
Siavash Rahimi (McGill University, Canada); Benoit Champagne (McGill University, Canada)
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DCT Type-III for Multicarrier Modulation
Elena Domínguez-Jiménez (Universidad Politecnica de Madrid, Spain); Gabriela Sansigre (Politechnical University of Madrid, Spain); Pedro Amo-López (Universidad de Alcalá, Spain); Fernando Cruz-Roldán (Universidad Alcalá, Spain)
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Preamble-based Synchronization for OFDM/OQAM Systems
Davide Mattera (Università degli Studi di Napoli Federico II, Italy); Mario Tanda (Università di Napoli Federico II, Italy)
pp. 1598-1602

Improved Interference Approximation Method for Preamble-based Channel Estimation in FBMC/OQAM
Eleftherios Kofidis (University of Piraeus, Greece); Dimitrios Katselis (Royal Institute of Technology (KTH), Sweden)
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Power Balancing in FBMC-MISO Systems
Màrius Caus (Universitat Politecnica de Catalunya (UPC), Spain); Ana Perez-Neira (UPC, Spain)
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Linear Data Estimators for UW-OFDM: Classical and Bayesian Approaches
Mario Huemer (Klagenfurt University, Austria); Alexander Onic (Klagenfurt University, Austria); Christian Hofbauer (Klagenfurt University, Austria)
pp. 1613-1617

On Preamble-Based Channel Estimation in OFDM/OQAM Systems
Dimitrios Katselis (Royal Institute of Technology (KTH), Sweden); Mats Bengtsson (Royal Institute of Technology, Sweden); Cristian Rojas (Royal Institute of Technology (KTH), Sweden); Håkan Hjalmarsson (KTH-Royal Institute of TEchnology, Sweden); Eleftherios Kofidis (University of Piraeus, Greece)

pp. 1618-1622

Cyclostationary Autocorrelation Based CFO Estimators
Gustavo González (Instituto de Investigaciones en Ingeniería Eléctrica & Universidad Nacional del Sur, Argentina); Fernando Gregorio (Universidad Nacional del Sur, Argentina); Juan Cousseau (Universidad Nacional del Sur, Argentina); Stefan Werner (Helsinki University of Technology, Finland); Risto Wichman (Aalto university school of science and Technology, Finland)
pp. 1623-1627

CRC-aided Iterative Optimal Detection for MIMO-OFDM Systems with Linear Precoding
Felip Riera-Palou (University of the Balearic Islands, Spain); Guillem Femenias (University of the Balearic Islands & Mobile Communications Group, Spain)
pp. 1628-1632

Minimax Robust Power Allocation Over Parallel Communication Channels
Muhammad Danish Nisar (Technical University Munich, TUM & Nokia Siemens Networks, NSN, Germany); Wolfgang Utschick (Technische Universität München, Germany)
pp. 1633-1637

An Adaptive Modulation Precoding Scheme for Mean BER Minimisation of ISI MIMO Channels
Waleed Al-Hanafy (Menoufia University, Egypt); Stephan Weiss (University of Strathclyde, United Kingdom)
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AUD-L2: Spatial aspects in audio and electroacoustics

Estimation of the Energy Ratio Between Primary and Ambience Components in Stereo Audio Data
Aki Härmä (Philips Research, The Netherlands)
pp. 1643-1647

Sequential and Direct Access of HRTFS for Quasi-Continuous Angular Positions
Christiane Antweiler (RWTH Aachen University, Germany); Peter Vary (RWTH Aachen University, Germany)
pp. 1648-1652

A Ray Tracing Simulation of Sound Diffraction Based on Analytic Secondary Source Model
Masashi Okada (Osaka University, Japan); Takao Onoye (Osaka University, Japan); Wataru Kobayashi (Arnis Sound Technologies, Co., Ltd., Japan)
pp. 1653-1657

Room Impulse Response Reshaping by Joint Optimization of Multiple p-Norm Based Criteria
Jan Ole Jungmann (University of Luebeck, Germany); Tiemin Mei (Shenyang Ligong University, P.R. China); Stefan Goetze (Fraunhofer IDMT, Germany); Alfred Mertins (Institute for Signal and Image Processing, University of Luebeck, Germany)
pp. 1658-1662

An Uncertainty Estimation Approach for the Extraction of Source Features in Multisource Recordings
Kamil Adiloglu (INRIA, Centre de Rennes, France); Emmanuel Vincent (INRIA, Centre de Rennes, France)

pp. 1663-1667

IVP-L6: Image filtering

A Fast Method for Computing the Output of Rank Order Filters Within Arbitrarily Shaped Windows
Paul Murray (University of Strathclyde, United Kingdom); Stephen Marshall (University of Strathclyde, United Kingdom)
pp. 1668-1672

Bayesian Partial Out-of-focus Blur Removal with Parameter Estimation
Bruno Amizic (Northwestern University, USA); Rafael Molina (Universidad de Granada, Spain); Aggelos K. Katsaggelos (Northwestern University, USA)
pp. 1673-1677

Space-variant Kernel Deconvolution for Dual Exposure Problem
Miguel Tallón (Universidad de Granada, Spain); Javier Mateos (University of Granada, Spain); Sevket Derin Babacan (Northwestern University, USA); Rafael Molina (Universidad de Granada, Spain); Aggelos K. Katsaggelos (Northwestern University, USA)
pp. 1678-1682

Noise Reduction for Path Traced Imaging of Participating Media
Qing Xu (Tianjin University, P.R. China); Yu Liu (Tianjin University, P.R. China); Ruijie Zhang (Tianjin University, P.R. China); Shiqiang Bao (Tianjin University, P.R. China); Riccardo M. Scopigno (Istituto Superiore Mario Boella, Italy); Mateu Sbert (Institut d'Informatica i Aplicacions, Spain)
pp. 1683-1687

Morphological Regularization for Adaptation of Image Opening
Makoto Nakashizuka (Osaka University, Graduate School of Engineering Science, Japan); Yu Ashihara (Osaka University & Graduate School of Engineering Science, Japan); Youji Iiguni (Osaka University, Graduate School of Engineering Science, Japan)
pp. 1688-1692

SAM-L2: Radar

Antenna Subset Selection in Distributed Multiple-Radar Architectures: a Knapsack Problem Formulation
Hana Godrich (Princeton University & Rutgers University, USA); Athina Petropulu (Drexel University, USA); H. Vincent Poor (Princeton University, USA)
pp. 1693-1697

Range Recursive and Taylor Series Based STAP for Range Dependent Clutter Rejection
Sylvie Marcos (Laboratoire des Signaux et Systems, Supélec, CNRS UMR, France); Sophie Beau (Laboratoire des Signaux et Systèmes-CNRS Supelece, France)
pp. 1698-1702

Performances of Polarimetric Subspace SAR Processors for Target Detection and Interference Rejection
Frédéric Brigui (University of Toulouse & ISAE, France); Guillaume Ginolhac (SATIE & ENS

SS-13: Special Session on "Dependent component analysis"

AUD-L3: Learning and estimation in audio processing

Single-Microphone Blind Channel Identification in Speech Using Spectrum Classification
Nikolay D Gaubitch (Imperial College London, United Kingdom); Mike Brookes (Imperial College London, United Kingdom); Patrick A Naylor (Imperial College London, United Kingdom); Dushyant Sharma (Imperial College London, United Kingdom)
pp. 1748-1751

Model for Memory-based Music Transcription and Its Variational Bayes Solution
Stepan Albrecht (University of West Bohemia, Czech Republic); Václav Šmídl (Institute of Information Theory and Automation, Prague, Czech Republic)
pp. 1752-1755

Impact of Excitation Frequency on Short-Term Recording Synchronisation and Confidence Estimation
Danil Korchagin (Idiap Research Institute, Switzerland)
pp. 1756-1760

Structure-Aware Dictionary Learning with Harmonic Atoms
Ken O'Hanlon (Queen Mary University of London, United Kingdom); Mark D. Plumbley (Queen Mary University of London, United Kingdom)
pp. 1761-1765

PA-P3: Navigation, radio localization and positioning

Analysis of a Robot Positioning System Based on a Rotating Receiver, Beacons, and Coded Signals
Vincent Pierlot (University of Liege, Belgium); Marc Van Droogenbroeck (Université de Liège & Intelsig, Belgium)
pp. 1766-1770

Combination of Adaptive Filters for Relative Navigation
Luiz Chamon (University of São Paulo, Brazil); Cassio Lopes (University of São Paulo, Brazil)
pp. 1771-1775

Indoor Positioning in Wireless LANs Using Compressive Sensing Signal-Strength Fingerprints
Dimitris Milioris (INRIA & FORTH-ICS, France); George Tzagkarakis (CEA, France); Philippe Jacquet (INRIA, France); Panagiotis Tsakalides (FORTH-ICS and University of Crete, Greece)
pp. 1776-1780

A Weighted Fastmap Algorithm for Wireless Sensor Nodes Localization
Waleed Saif (Leeds University, United Kingdom); Desmond McLernon (The University of Leeds, United Kingdom); Mounir Ghogho (University of Leeds, United Kingdom)
pp. 1781-1785

Use of Cubic Bézier Curves for Route Planning
Costas Xydeas (Lancaster University, United Kingdom); Colin Brown (Lancaster University, United Kingdom)
pp. 1786-1789

Distance and Orientation Measurement of a Flat Surface by a Single Underwater Acoustic Transducer
Vincent Creuze (University Montpellier 2 / CNRS - LIRMM, France)

pp. 1790-1794

Mitigation of GPS Periodic Multipath Using Nonlinear Regression
Quoc-Huy Phan (Nanyang Technological University, Singapore); Su-Lim Tan (Nanyang Technological University, Singapore)
pp. 1795-1799

FIR Smoothing of Discrete-Time State-Space Models with Applications to Clocks
Oscar Ibarra-Manzano (Guanajuato University, Mexico); Morales-Mendoza Luis (Veracruzana University, Mexico); Yuriy S. Shmaliy (Guanajuato University, Mexico)
pp. 1800-1804

HMM-based Underwater Target Classification with Synthesized Active Sonar Signals
Taehwan Kim (Kyungpook National University, Korea); Keun Sung Bae (Kyungpook National University, Korea)
pp. 1805-1808

Localization in Wireless Networks Based on Jointly Compressed Sensing
Sofia Nikitaki (University of Crete, Greece); Panagiotis Tsakalides (FORTH-ICS and University of Crete, Greece)
pp. 1809-1813

Automatic Modulation Classifier for Military Applications
Víctor Iglesias (Universidad Politécnica de Madrid, Spain); Jesús Grajal (Universidad Politécnica de Madrid, Spain); Omar Yeste (Universidad Politécnica de Madrid, Spain)
pp. 1814-1818

SPCOM-L4: Multi-user and cooperative MIMO

Network MIMO for Downlink In-Band Relay Transmissions with Relaying Phases of Fixed Duration
Adrian Agustin (Technical University of Catalonia (UPC), Spain); Josep Vidal (Universitat Politècnica de Catalunya, Spain); Sandra Lagen (UPC, Spain); Eduard Valera (UPC, Spain)
pp. 1819-1823

ZF DFE Transceiver Design for MIMO Relay Systems with Direct Source-Destination Link
Andrew P Millar (University of Strathclyde, United Kingdom); Stephan Weiss (University of Strathclyde, United Kingdom); Robert Stewart (University of Strathclyde, United Kingdom)
pp. 1824-1828

Achievable Sum-Rates in the Two-User Gaussian Multiple-Access Channel with a MIMO-AF-Relay
Frederic Knabe (Ulm University, Germany); Aydin Sezgin (TU Darmstadt & Network Information Theory Lab, Germany)
pp. 1829-1833

Power Minimization in Parallel Vector Broadcast Channels with Separate Linear Precoding
Christoph Hellings (Technische Universität München, Germany); Wolfgang Utschick (Technische Universität München, Germany); Michael Joham (Technische Universität München, Germany)
pp. 1834-1838

Performance Analysis of WL Alamouti Receivers for Real-Valued Constellations in Multiuser Context
Florian Dupuy (Thales Communications & Université Paris-Est, France); Pascal Chevalier (Thales Communication, France)
pp. 1839-1843

SPT-P5: Source separation

Post-nonlinear Speech Mixture Identification Using Single-Source Temporal Zones & Curve Clustering
Matthieu Puigt (Foundation for Research and Technology - Hellas, Greece); Anthony Griffin (FORTH/University of Crete, Greece); Athanasios Mouchtaris (Foundation for Research and Technology-Hellas, Greece)
pp. 1844-1848

Nonparametric Independent Process Analysis
Zoltán Szabó (Eotvos Lorand University, Hungary); Barnabás Póczos (Carnegie Mellon University, USA)
pp. 1849-1853

Deflation-based FastICA Reloaded
Klaus Nordhausen (University of Tampere, Finland); Pauliina Ilmonen (University of Tampere, Finland); Abhijit Mandal (University of Tampere, Finland); Hannu Oja (University of Tampere, Finland); Esa Ollila (Aalto University, Finland)
pp. 1854-1858

Linear-quadratic and Polynomial Non-negative Matrix Factorization; Application to Spectral Unmixing
Inès Meganem (University of Toulouse / CNRS / IRAP - ONERA, France); Yannick Deville (University of Toulouse, France); Shahram Hosseini (University of Toulouse / CNRS / IRAP, France); Philippe Déliot (ONERA, France); Xavier Briottet (ONERA, France); Leonardo T Duarte (University of Campinas, Brazil)
pp. 1859-1863

A Geometrically Constrained Multimodal Time Domain Approach for Convolutive Blind Source Separation
Bahador Makki Abadi (University of Surrey, United Kingdom); Delaram Jarchi (University of Surrey, United Kingdom); Vahid Abolghasemi (University of Surrey, United Kingdom); Saeid Sanei (University of Surrey, United Kingdom)
pp. 1864-1868

Frequency Domain Blind Source Separation for Robot Audition Using a Parameterized Sparsity Criterion
Mounira Maazaoui (Telecom ParisTech, France); Yves Grenier (Télécom ParisTech, France); Karim Abed-Meraim (Telecom ParisTech, France)
pp. 1869-1873

Convolutive Blind Source Separation Based on GDFT Filterbanks and Pre-determined Subband Whitening
Ebrahim Ghanavati (Department of Electrical Engineering, Amirkabir University of Technology, Iran); Hamid Sheikhzadeh (Ryerson University, Canada); Kaamran Raahemifar (Ryerson University, Canada); Amin Kheradmand (Amirkabir University, Iran)

SS-14: Special Session on "Image and signal processing for 3DTV"

SS-15: Special Session on "Sparsity aware processing: theory and applications"

IMP-L2: Design and implementation. Oral II

IVP-L7: Human face analysis

An Extended Multiresolution Approach to Mouth Specific AAM Fitting for Speech Recognition
Craig Berry (Trinity College Dublin, Ireland); Anil Kokaram (Trinity College Dublin, Ireland); Naomi Harte (Trinity College Dublin, Ireland)
pp. 1959-1963

Using Subclasses in Discriminant Non-negative Subspace Learning for Facial Expression Recognition
Symeon Nikitidis (Aristotle University of Thessaloniki & CERTH ITI, Greece); Anastasios Tefas (Aristotle University of Thessaloniki, Greece); Ioannis Pitas (Aristotle University of Thessaloniki, Greece)
pp. 1964-1968

Estimation of Facial Action Intensities on 2D and 3D Data
Arman Savran (Bogazici University, Turkey); Bulent Sankur (Bogazici University, Turkey); Mustafa Bilge (Bogazici University, Turkey)
pp. 1969-1973

Person Specific Activity Recognition Using Fuzzy Learning and Discriminant Analysis
Alexandros Iosifidis (Aristotle University of Thessaloniki, Greece); Anastasios Tefas (Aristotle University of Thessaloniki, Greece); Ioannis Pitas (Aristotle University of Thessaloniki, Greece)
pp. 1974-1978

A Co-training Approach to Automatic Face Recognition
Xuran Zhao (EURECOM, France); Nicholas Evans (EURECOM, France); Jean-Luc Dugelay (Institut EURECOM, France)
pp. 1979-1983

SAM-P2: Localization

Cooperative Localization Using Efficient Kalman Filtering for Mobile Wireless Sensor Networks
Hadi Jamali Rad (Delft University of Technology, The Netherlands); Toon van Waterschoot (Delft University of Technology, The Netherlands); Geert Leus (Delft University of Technology, The Netherlands)
pp. 1984-1988

Best Linear Unbiased Estimator Algorithm for Received Signal Strength Based Localization
Lanxin Lin (Cityu University of Hong Kong, Hong Kong); Hing-Cheung So (City University of Hong Kong, Hong Kong)
pp. 1989-1993

Path Loss Factor Estimation for RSS-Based Localization Algorithms with Wireless Sensor Networks
Eduardo Hernández-Pérez (Universidad de Las Palmas de Gran Canaria, Spain); Juan L. Navarro-Mesa (University of Las Palmas de Gran Canaria, Spain); Sofia Martin-Gonzalez (University of Las Palmas de Gran Canaria, Spain); Pedro Quintana-Morales (University of Las Palmas de Gran Canaria, Spain); Antonio Ravelo-García (University of Las Palmas de Gran Canaria, Spain)
pp. 1994-1998

New Constrained Least Squares Approach for Range-Based Positioning
Lanxin Lin (Cityu University of Hong Kong, Hong Kong); Hing-Cheung So (City University of Hong Kong, Hong Kong)
pp. 1999-2003

New Trends in Passive Localization by Multiarray Network
Jonathan Bosse (Thales group, France); Anne Ferreol (Thales Communications, France); Pascal Larzabal (ENS-Cachan, PARIS, France)
pp. 2004-2008

Joint Estimation of Sound Source Location and Noise Covariance in Spatially Colored Noise
Futoshi Asano (AIST, Japan); Hideki Asoh (AIST, Japan)
pp. 2009-2013

Energy-efficient Positioning in Sensor Networks by a Game Theoretic Approach
Ana Moragrega (Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Spain); Pau Closas (Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Spain); Christian Ibars (Centre Tecnologic de Telecomunicacions de Catalunya - CTTC, Spain)
pp. 2014-2018

Distributed Consensus-based Tracking in Wireless Sensor Networks: a Practical Approach
Benjamín Béjar (Universidad Politécnica de Madrid, Spain); Pavle Belanovic (Universidad Politecnica de Madrid (UPM), Spain); Santiago Zazo (Universidad Politecnica Madrid, Spain)
pp. 2019-2023

SPA-P4: Multimodal signal processing applications

Symbolic to Numerical Conversion of DNA Sequences Using Finite-Context Models
Armando J Pinho (University of Aveiro, Portugal); Diogo Pratas (University of Aveiro, Portugal); Paulo Ferreira (University of Aveiro, Portugal); Sara Garcia (University of Aveiro, Portugal)
pp. 2024-2028

Spatio-temporal Fusion of Visual Attention Model
Anis Rahman (GIPSA-lab, France); Guanghan Song (Institut National Polytechnique de Grenoble, France); Denis Pellerin (GIPSA-lab, France); Dominique Houzet (Laboratoire GIPSA-Lab, France)
pp. 2029-2033

Sound Effect on Visual Gaze When Looking At Videos
Guanghan Song (Institut National Polytechnique de Grenoble, France); Denis Pellerin (GIPSA-lab, France); Lionel Granjon (GIPSA-lab, France)
pp. 2034-2038

A Visual Saliency Modulated Just Noticeable Distortion Profile for Image Watermarking
Yaqing Niu (Communication University of China, P.R. China); Matthew J Kyan (Ryerson University, Canada); Lin Ma (Department of Electronic Engineering, The Chinese University of Hong Kong, Hong Kong); Azeddine Beghdadi (L2TI, Universite Paris 13, France); Sridhar Krishnan (My Supervisor, Canada)
pp. 2039-2043

Robust Video Watermarking Using Maximum Likelihood Decoder
Abolfazl Diyanat (Sharif University of Technology, Iran); Mohammad Ali Akhaee (Computing and

Audio Research Lab (CARLAB), University of Sydney, Iran); Shahrokh Ghaemmaghami (Sharif University of Technology, Iran)
pp. 2044-2048

Online Multitechnology Sensors Explosive Recognition
Guillaume Lebrun (CEA, France); Anthony Larue (CEA, France); Frederic Suard (CEA, France)
pp. 2049-2053

Eddy Current Tomography of Deposits in Steam Generator
Zixian Jiang (Ecole Polytechnique, France); Mabrouka El Guedri (Electricité de France, France); Houssem Haddar (INRIA Saclay, France); Armin Lechleiter (INRIA Saclay, France)
pp. 2054-2058

SPT-L3: Detection

A New Family of Robust Non Gaussian Detectors Based on a Geometric Heuristic
Olivier Rabaste (Onera, France); Nicolas Trouvé (Onera, France)
pp. 2059-2063

Testing Quaternion Properness: Generalized Likelihood Ratios and Locally Most Powerful Invariants
Javier Vía (University of Cantabria, Spain); Luis Vielva (University of Cantabria, Spain)
pp. 2064-2068

Multiantenna GLR Detection of a Gaussian Signal in Spatially Uncorrelated Noise
Josep Sala (Technical University of Catalonia, Spain)
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Hugo Proença (University of Beira Interior & IT-Instituto de Telecomunicações, Portugal)
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Mauricio Ramalho (Instituto de Telecomunicações, Portugal); Sanchit Singh (IT, IST, Portugal); Paulo Lobato Correia (Instituto Superior Tecnico & Instituto de Telecomunicacoes, Portugal); Luis Ducla Soares (I.S.C.T.E. / I.T. - Lisbon, Portugal)
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Marco Jeub (RWTH Aachen University, Germany); Christoph Nelke (RWTH Aachen University,

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Timo Gerkmann (Royal Institute of Technology (KTH), Sweden)
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Balazs Fodor (Technische Universitaet Braunschweig, Institute for Communications Technology, Germany); Tim Fingscheidt (Technische Universität Braunschweig, Germany)
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Kazunobu Kondo (Nagoya University & Yamaha Corporation, Japan); Yu Takahashi (Yamaha Corporation, Japan); Seiichi Hashimoto (Yamaha Corporation, Japan); Hiroshi Saruwatari (Graduate School of Information Science, Nara Institute of Science and Technology, Japan); Takanori Nishino (Mie University, Japan); Kazuya Takeda (Nagoya University, Japan)
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